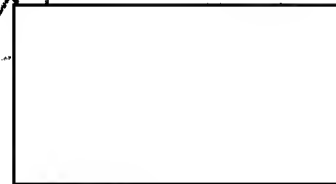


21 November 1960

Brig. General A. J. Goodpaster
Staff Secretary
The White House
Washington 25, D. C.



STAT

Dear Andy:

Mr. Dulles thought you would
be interested in reading the attached
article by G. Zhukov (no relation to
the Zhukov) from the Soviet magazine,
International Affairs, of October 1960.

Jun 1 1961
KIM
Chris
ER file

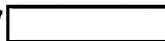
Sincerely,


Executive Officer

STAT

Attachment:

Article entitled "Space Espionage
Plans and International Law,"

EO/DCI/:blp 21 Nov 60

Distribution:

Original - Addressee w/att
1 - ER w/cy att
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ACTIVE REGISTRY FILE

G. ZHUKOV

Space Espionage Plans and International Law

THE inglorious failure of the U-2 flight over the Soviet Union has acted as a sort of spur to the Pentagon in its search for new, more effective means of espionage against the U.S.S.R. and the other Socialist countries. Now the Pentagon is putting its main hopes on the so-called spy-in-the-sky satellites. L. Kraar, Washington correspondent of the *Wall Street Journal*, wrote that "now that Russia has proved it can knock American spy planes out of the sky, the United States will rush development of a new method for peeping behind the Iron Curtain—via satellites in space".¹

Attention is concentrated mainly on the Samos spy satellite. Its development has been accorded top national priority by the U.S. Administration. Such priority is enjoyed only by the long-range missile programmes, the Mercury project for sending a man into outer space, and the powerful Saturn missile, also intended for space flights. The U.S. Government has allotted over \$200 million for the Samos project in the 1960/61 fiscal year.

The main contractor in developing spy satellites is Lockheed Aircraft, the selfsame corporation which manufactures the U-2 spy plane.

The Samos system is scheduled to become operative in 1962. The plan is to put a number of these spy satellites into a polar orbit to keep the territory of the U.S.S.R. and the other Socialist countries under constant surveillance. The first experimental launching is due at the end of this year. Samos is to be orbited by an Atlas-Agena rocket from the missile ramp in the Pacific, at Point Arguello, California. The satellite will pass over both poles along an orbit which will enable it to fly over a considerable part of the territory of the Soviet Union and the other Socialist countries.

According to Associated Press correspondent Danton, Samos travelling in a polar orbit, will

be able to keep under observation each square mile of the Earth's surface and transmit to American ground stations data about the location of Soviet missile sites and any unusual concentration of troops or materiel.

Specialists of the Bendix Aviation Co. concerned primarily with military technology stress that, if Samos travels at an altitude of about 300 miles, it will be possible with the available lenses and TV equipment to make photographs equivalent to what can be seen from an altitude of 100 feet. Each photograph made at that altitude, in the opinion of the specialists, will cover an area of several square miles. On such pictures it will be possible to find and identify all communications, airfields, naval installations, etc. Much larger areas, the specialists think, could be photographed from a satellite flying at an altitude of from 2,000 to 3,000 miles. But in that case the photographs would not be of much value to intelligence agencies.

The above-mentioned L. Kraar reported that "the miniature moon will carry TV-like equipment, to stare at Soviet territory as it orbits hundreds of miles overhead. Its function will be to spot missile launching pads, airfields, industrial plants and any massive build-up of Communist military equipment. Its photographic intelligence will be relayed back to the United States for inspection."²

The *New York Times* in its issue of May 26 said in a leader "Sentry in the Sky" that "the Samos, when perfected, will be a veritable 'eye-in-the-sky'.... It would make such efforts as U-2 information-gathering flights over the Soviet Union wholly obsolete." The paper notes that "unlike the U-2 which can be shot down, the Samos will be practically invulnerable against an enemy's effort". According to the paper it would be invulnerable because of the impossibility of determining its position when it passes over the "surveyed" territory.

¹ *Wall Street Journal*, May 10, 1960.

² *Ibid.*

In confirmation of its view, the paper refers to the following circumstances. "In the first place, the launching of such a satellite need not be made public, so that its very existence would not be known. Secondly, the taking of pictures is a silent operation, undetectable from the ground. Thirdly, the sending down of its information electronically will not take place until commanded to do so when it is over United States territory, so that its signals could not be interfered with." The *New York Times* arrives at the conclusion that "one such 'eye-in-the-sky' could thus do the job of hundreds of manned U-2's in complete safety".

We see the U.S. press advertise the advantages of cosmic espionage. But the cold war drummers are engaging in wishful thinking. The realities are not encouraging in the least. Long efforts on the part of an army of scientists and specialists in artificial satellites and rocketry have not yet yielded the results expected by the cold war strategists from the Pentagon. U.S. specialists and even the publications which blow up American performance in this sphere admit that the U.S.A. markedly lags behind the Soviet Union in the conquest of space. Another convincing confirmation of this was the launching and predetermined landing of the second Soviet space ship which weighed 4.6 tons.

The enormous Soviet successes in the conquest of space rattle the more aggressive U.S. circles. That is why U.S. propaganda, a faithful servitor of Wall Street monopolies, is straining to prove the alleged U.S. superiority in cosmic research, in order to raise America's shaken military prestige at any cost. This alone seems to explain the candid cynicism of the U.S. machine working on the public, which does not blush to admit the real aims of the imperialist artificial satellite programme.

American military men are joining this propaganda campaign with increasing vigour. Obviously overestimating their possibilities of carrying out space espionage plans, Pentagon generals are discussing with serious mien the problem of "processing" intelligence data about the defences of the Soviet Union which they hope to obtain with the help of Samos satellites.³

The Samos project is closely related to the development of the military Midas satellites. The main purpose of the latter is to keep the

Earth under observation with the help of instruments sensitive to rays emitted by hot gases formed during the launching of rockets. The idea is that as soon as Samos satellites detect missile bases in Soviet territory, Midas will keep watch over them and register the launching of missiles.

When Midas becomes operative, the *Wall Street Journal* claims, "it is expected to be sufficiently sophisticated to disclose the number of missiles being launched, the approximate points from which they are fired, and their general direction".

The *New York Herald Tribune* stresses the tremendous military significance of the Midas system and discusses the possibility of a closer watch over Soviet rockets tests and the gaining of more precise information on how successful the launchings are.⁴

According to the American press, the Midas system could not be put into service before 1962. The scheme calls for launching into polar orbits from six to eight Midas satellites, which would transmit information to stations located in different parts of the world. But so far experimental launchings have been unsuccessful. The first trial made on February 26 failed because of the explosion of two auxiliary rockets. On May 24, a Midas was put into orbit but the signalization system proved faulty and the main aim of the trial, to test the rocket detection system, was not achieved.

Ralph Danton of the Associated Press, who is well posted on rocketry matters, brazenly asserts that "with Samos to pick out launching sites and Midas to flash information about launching, the United States will have an effective sky-spy team".

Closely related to the space espionage projects (Samos and Midas) is the programme for employing Discoverer satellites for intelligence purposes. The military Discoverer satellites are intended to solve the problem of bringing containers with photographic intelligence back to earth. By September 13, 1960, 15 satellites had been launched under this programme. The first was put into orbit but had no container; five launchings failed; seven satellites were put into orbit and their containers evidently separated, but were not retrieved. The containers of two others were retrieved.

The American press is trying to present the launching of 2 Discoverers last August as a definite step towards manned space flight. But U.S. Navy spokesmen have dotted all the i's: they said

³ It is planned that the Samos should in some cases transmit its television signals to a ground station each time it makes a photograph, while in other cases it will accumulate a number of photographs made over Soviet territory and transmit them to the ground station when it flies over U.S. territory.

⁴ *New York Herald Tribune*, Feb. 21, 1960.

the main purpose of the Discoverer programme was to perfect the launching, orbiting and retrieving of sky-spy containers. General Shriver, Chief of the U.S. Air Force Staff, Office of Research and Improvements, said recently there was no direct connection between Discoverer and the Government's project Mercury for sending a man into space. The real purpose of the Discoverers, he added, has always been to promote the sky-spy projects.

It is highly indicative that American military leaders have sought to utilize for espionage even the civilian meteorological satellite, Tiros, which was designed for photographing the cloud cover of the globe. J. Finney, Washington correspondent of the *New York Times*, reported on May 26, 1960, that no sooner had it become known that a U-2 plane had been shot down in the Soviet Union than the National Aeronautics and Space Administration gave the signal to the Tiros-1 satellite to take pictures when passing over the Soviet Union and the Chinese People's Republic.

Thus, the U.S. military leaders expect to utilize artificial satellites to obtain intelligence data. The main purpose of space espionage is to increase the efficacy of a surprise attack, making it possible to knock out enemy missile bases at the very start and thereby avoid a retaliatory blow. Claims by Pentagon leaders and other U.S. officials that space espionage is needed to prevent a so-called surprise attack by establishing the location of Soviet missile bases are absolutely untenable and are designed to justify the long discredited brinkmanship policy condemned by world opinion.

N. S. Khrushchov has pointed out that "information about the location of such bases can be of importance not for a country concerned with its defence requirements, but solely for a state which contemplates aggression and intends to strike the first blow and therefore wants to destroy the missile bases so as to avoid retribution after attack".

It is clear that space espionage is designed to prepare a preventive rocket nuclear war against the Soviet Union and the other Socialist countries. But the calculations of U.S. military men for a surprise attack to hit defence targets earlier discovered in the U.S.S.R. are based on sand. The Soviet Union has everything necessary to paralyze U.S. military espionage both in the air and in outer space. And Soviet rockets ensure a counterblow at the aggressor in any case. This should not be forgotten by those who fool themselves with the hope of delivering the first blow and escaping retribution.

The space espionage schemes harboured by U.S. ruling circles are a concrete expression of their extensive plans for the use of outer space to prepare a devastating rocket nuclear war. This, by the way, shows how insincere are the statements of U.S. officials about American interest in the peaceful uses of outer space.

In view of the plans to develop and launch satellites for military reconnaissance, American propaganda has in recent years been busy proving the "legality" of space espionage. *Foreign Affairs*, for example, has written that "consistent with our appeal for 'open skies', we might well recommend that reconnaissance by an orbiting satellite be accepted in international law".⁵

Such statements became especially numerous after the U.S.A. proclaimed espionage to be its state policy.

It should be noted that American plans of space espionage directed against the security of the U.S.S.R. and the other Socialist countries are incompatible with the generally recognized principles and rules of international law, designed to protect the security of states against encroachments from outside, including outer space. In the past, considerations of state security have been of decisive importance in determining the air space regime. Today the same considerations must underlie the regime of outer space.

As pointed out earlier in this journal, the best, most effective means of safeguarding the security of states from the direction of outer space would be to conclude an agreement on the demilitarization and neutralization of outer space.⁷

Whereas demilitarization of outer space above all implies a prohibition within this space of any activity that pursues military purposes in peacetime, including espionage, neutralization of outer space means the exclusion of this space from the sphere of hostilities in case of armed conflict.⁸ In this way an agreement on the demilitarization and neutralization of outer space would be an effective means of banning the use of this space for military purposes. It would become a prerequisite for the use

⁵ See article by Maj.-Gen. M. Milstein "The U.S.A. Plans Military Use of Outer Space", *International Affairs*, Moscow, No. 5, 1959, pp. 44-49.

⁶ *Foreign Affairs*, October 1958, p. 105.

⁷ See on this point *International Affairs*, Moscow, No. 11 and No. 12, 1959.

⁸ For a general conception of demilitarization and neutralization in international law see L. Oppenheim *International Law*, London, 1955, Vol. 1, p. 243.

of this space solely for peaceful purposes in the interest of co-operation and mutual confidence.

The Soviet Government's proposal of March 15, 1958, indicated a realistic way of settling the problem of banning the use of outer space for military purposes. It will be recalled that it favoured a broad international agreement on outer space banning the use of cosmic space for military purposes provided foreign military bases abroad were dismantled, and cosmic launchings were made only under a co-ordinated international programme.

The realistic nature of the Soviet proposal ensured it favourable public comment in many countries. Yet, at the 13th U.N. General Assembly, the U.S.A. opposed the Soviet proposal and took a stand which, in substance, called for the separation of international co-operation in the use of space for peaceful purposes, from the problem of disarmament. This ignored the simple truth that only a cardinal solution of the disarmament problem could create favourable conditions for international co-operation in the peaceful use of space. The U.S.S.R. proceeds from the fact that universal and total disarmament could create the most favourable conditions for the peaceful use of the cosmos.

Demilitarization and neutralization of outer space is one aspect of the general problem of disarmament. But the absence of agreement on disarmament as a whole and also on demilitarization and neutralization of outer space cannot serve in any way as justification for the American plans to utilize outer space for military purposes.

The activities of states in outer space must conform to the aims and principles of the United Nations Charter. The demand of the U.N. Charter that states should refrain from the threat or use of force against the territorial integrity or political independence of any state, must also extend to outer space. In other words, each state has a right to use outer space at its own discretion, but without causing harm or damage to other states. This is also said in a resolution on sovereignty over air space and the legal regime of the cosmos, adopted by a Conference of the International Law Association in August 1960.

The foregoing is sufficient ground for recognizing as unlawful, from the standpoint of the existing rules of international law, the attempts of certain U.S. circles to utilize outer space for military purposes. Consequently, the efforts of U.S. military leaders to employ artificial satellites for the collection of intelligence data are unlawful. More than that, in this case it is possible to draw an analogy with the rules

of air law which declare aerial espionage unlawful and specifically prohibit the use of photographic equipment for these purposes. We can refer, for example, to Article 36 of the Chicago Convention of 1944 which stipulates that "each contracting state may prohibit or regulate the use of photographic apparatus in aircraft over its territory".

From the viewpoint of the security of a state it makes absolutely no difference from what altitude espionage over its territory is conducted. A state will not feel any safer because military preparations against it are carried on at a very high altitude. The main thing is that the object of espionage and the results are the same irrespective of the altitude. Hence there is absolutely no ground for alleging that espionage at a high altitude, with the aid of artificial Earth satellites, is quite lawful under the existing rules of international law. Any attempt to use satellites for espionage is just as unlawful as attempts to use aircraft for similar purposes.

In this connection we may quote the American journal *Missiles and Rockets*, which wrote in May 1960 that "the only real difference between the concept of Samos and U-2 was altitude. One flies 15 miles high and the other, 300."

The American lawyer Katzenbach expresses himself still more explicitly on this point. According to him, whether the observation "is higher or lower is irrelevant to the objections an observee state would posit or the claims the observer would make."⁹ Many other bourgeois writers have come out against space espionage.¹⁰

In their effort to justify space espionage U.S. ruling circles seek to take advantage of the fact that the altitude limit to which state sovereignty extends has not been settled in international law.¹¹ The *Wall Street Journal*, obviously expressing the view of official Washington circles, tries to prove that a spy satellite does not engage in unlawful activity inasmuch as national frontiers do not extend for hundreds of miles into outer space.¹²

One view widely current in the United States is that as long as the altitude limit to which state sovereignty extends is not settled by way of a treaty, it should depend on the ability of a

⁹ *Bulletin of the Atomic Scientists*, June 1953, p. 222

¹⁰ See Kroel, "Eléments créateurs d'un droit astronautique" *Revue générale de l'Air*, 1953, No. 3/4, p. 240
Danier et Saporta, "Les satellites artificiels et le droit aérien", *Revue générale de l'Air*, 1955, No. 3, p. 303.

¹¹ On this point see *International Affairs*, Moscow, No. 11, 1959, pp. 88-96.

¹² *Wall Street Journal*, May 10, 1960.

country effectively to control the space over its territory.

Sulzberger, well-known American journalist, tried to justify space espionage in this way. He wrote that "the sole law applicable to air space remains that of ancient Rome: 'He who owns the ground, owns everything to the heavens and to the depths'. But this is enforceable only to the extent that it can be policed."¹³ Sulzberger holds that as long as spy satellites are beyond reach, their launching is perfectly legal and should not arouse objection.

Such assertions are designed to justify the claims to American control over outer space made by U.S. military and political leaders. In line with these claims, attempts are made to prove the legality of space espionage over the territory of the Soviet Union and the other Socialist countries. At the same time measures are discussed to prevent similar action over U.S. territory.

According to the Associated Press, methods of combatting satellites are being intensively developed in the United States. This includes a study of the possibility of developing an "inspection satellite" equipped with instruments to ascertain what electronic and other equipment is carried by the suspected satellite. There are plans to develop a satellite equipped with devices for putting out of commission electronic and photographic equipment installed on reconnaissance satellites and also to develop an interceptor satellite, launched from the ground or from a plane, for the destruction of spy satellites.

In an effort to mislead world opinion alarmed by the Pentagon's space espionage plans, American propaganda is distorting the position of the Soviet Union on this question. The American press frequently alleges that the Soviet

Union is opposed to aerial espionage, but does not object to space espionage. The *New York Times* even tries to present the position of the U.S.S.R. as follows: "You can send satellites over our country all you please. They can carry cameras, radios, food for a spaceman. But they must fly high up—at an altitude where we cannot bring them down. It is outrageous to overfly at 80,000 to 100,000 feet but not at 100 miles and more."

The Soviet stand on the use of outer space is well known. The Soviet sputniks have only peaceful, scientific purposes. Another convincing example of this is the recent orbiting and return to earth of the second Soviet space ship. This outstanding scientific feat opened another brilliant page in man's conquest of space. The vital scientific and technical problem of return from space has been solved.

The Soviet Union is prepared to co-operate with any state in the peaceful uses of outer space. But it vigorously objects to any attempts to militarize it, and the use of space vehicles for the purposes of military espionage. Our stand on the American space espionage plans is determined by our attitude to everything that runs counter to the interests of peace and helps prepare for aggressive war.

In case of need the Soviet Union will be able to protect its security against any encroachments from outer space just as successfully as it is done with respect to air space. As N. S. Khrushchov said, "if other espionage methods are used, they will also be paralyzed and rebuffed".

Such action will be fully justified under the existing rules of international law and the United Nations Charter. The Soviet Union cannot remain indifferent to acts of espionage directed against its security, irrespective of whether air space or outer space is used for these purposes.

¹³ *New York Times*, May 23, 1960.